

Disclosed are a projection exposure apparatus and a device manufacturing method using the same, in which a pattern of a reticle illuminated with laser light from a continuous emission excimer laser is projected on a substrate by use of a projection optical system. The projection optical system comprises a lens system made of a substantially single glass material.

10 There is a pulse emission laser provided, for
injecting pulse light into the continuous emission
excimer laser, for injection locking. This
structure assures accurate projection of the
reticle pattern, while enabling improvements of
15 the throughput.